



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/553,431A
Source: 1600
Date Processed by STIC: 7/22/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:19

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\I553431A.raw

3 <110> APPLICANT: Osteryoung, Katherine W.
5 <120> TITLE OF INVENTION: Manipulation of Min Genes in Plants
7 <130> FILE REFERENCE: 920905.90041
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/553,431A
C--> 10 <141> CURRENT FILING DATE: 2000-04-19
12 <150> PRIOR APPLICATION NUMBER: 60/130,403
13 <151> PRIOR FILING DATE: 1999-04-19
15 <160> NUMBER OF SEQ ID NOS: 6
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 978
21 <212> TYPE: DNA
22 <213> ORGANISM: Arabidopsis thaliana
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (1)..(978)
28 <400> SEQUENCE: 1
29 atg gcg tct ctg aga ttg ttc tca acg aat cat caa tct ctt ctc ctt 48
30 Met Ala Ser Leu Arg Leu Phe Ser Thr Asn His Gln Ser Leu Leu Leu
31 1 5 10 15
33 cca tca tct ctc tca caa aag act cta ata tct tca cca aga ttc gtc 96
34 Pro Ser Ser Leu Ser Gln Lys Thr Leu Ile Ser Ser Pro Arg Phe Val
35 20 25 30
37 aat aac cct agc aga cgg agt cca ata cga tcc gtt ctt caa ttt aat 144
38 Asn Asn Pro Ser Arg Arg Ser Pro Ile Arg Ser Val Leu Gln Phe Asn
39 35 40 45
41 cgc aaa ccg gaa ctc gcc gga gaa acg ccg cgt atc gtc gtt atc acc 192
42 Arg Lys Pro Glu Leu Ala Gly Glu Thr Pro Arg Ile Val Val Ile Thr
43 50 55 60
45 tcc gga aaa ggc ggt gtt gga aag acg aca acc acc gca aat gtc ggt 240
46 Ser Gly Lys Gly Gly Val Gly Lys Thr Thr Thr Ala Asn Val Gly
47 65 70 75 80
49 ctc tct ctc gct cgt tac ggt ttc tca gtt gtc gcc att gac gcc gac 288
50 Leu Ser Leu Ala Arg Tyr Gly Phe Ser Val Val Ala Ile Asp Ala Asp
51 85 90 95
53 ctt ggt ctc cgt aac ctc gat ctc cta ggg tta gag aat cga gtc 336
54 Leu Gly Leu Arg Asn Leu Asp Leu Leu Gly Leu Glu Asn Arg Val
55 100 105 110
57 aat tac act tgc gtc gag gtt ata aac gga gat tgt cgt ctc gat caa 384
58 Asn Tyr Thr Cys Val Glu Val Ile Asn Gly Asp Cys Arg Leu Asp Gln
59 115 120 125
61 gct ctg gta cgt gat aag cgt tgg tcg aat ttc gaa ttg cta tgt ata 432
62 Ala Leu Val Arg Asp Lys Arg Trp Ser Asn Phe Glu Leu Leu Cys Ile

Does Not Comply
Corrected Diskette Needed
pp 6-7

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:19

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\I553431A.raw

63	130	135	140															
65	tct	aaa	cct	aga	tcg	aaa	ctt	ccg	atg	gga	ttt	ggt	ggt	aaa	gca	ttg	480	
66	Ser	Lys	Pro	Arg	Ser	Lys	Leu	Pro	Met	Gly	Phe	Gly	Gly	Lys	Ala	Leu		
67	145					150					155				160			
69	gaa	tgg	ctt	gtg	gat	gcf	ttg	aaa	act	aga	ccg	gaa	ggt	tca	ccg	gat	528	
70	Glu	Trp	Leu	Val	Asp	Ala	Leu	Lys	Thr	Arg	Pro	Glu	Gly	Ser	Pro	Asp		
71						165				170				175				
73	tcc	atc	atc	atc	gat	tgt	cct	gca	gga	atc	gat	gcc	gga	ttc	ata	acc	576	
74	Phe	Ile	Ile	Ile	Asp	Cys	Pro	Ala	Gly	Ile	Asp	Ala	Gly	Phe	Ile	Thr		
75						180				185				190				
77	gcc	att	act	ccg	gcf	aat	gaa	gca	gtt	ctg	gta	aca	act	ccg	gat	ata	624	
78	Ala	Ile	Thr	Pro	Ala	Asn	Glu	Ala	Val	Leu	Val	Thr	Thr	Pro	Asp	Ile		
79						195				200				205				
81	aca	gcf	tta	agg	gat	gct	gat	agg	gtt	acg	ggt	ttg	tta	gaa	tgc	gat	672	
82	Thr	Ala	Leu	Arg	Asp	Ala	Asp	Arg	Val	Thr	Gly	Leu	Leu	Glu	Cys	Asp		
83						210				215				220				
85	gga	atc	aga	gat	ata	aag	atg	att	gtg	aac	aga	gtg	aga	act	gat	atg	720	
86	Gly	Ile	Arg	Asp	Ile	Lys	Met	Ile	Val	Asn	Arg	Val	Arg	Thr	Asp	Met		
87						225				230				235		240		
89	att	aaa	gga	gag	gat	atg	atg	tca	gtg	tta	gat	gtg	cag	gag	atg	ttg	768	
90	Ile	Lys	Gly	Glu	Asp	Met	Met	Ser	Val	Leu	Asp	Val	Gln	Glu	Met	Leu		
91						245				250				255				
93	gga	ttg	tca	ttg	ctt	ggt	gta	att	cct	gaa	gat	tct	gag	gtt	att	cga	816	
94	Gly	Leu	Ser	Leu	Gly	Val	Ile	Pro	Glu	Asp	Ser	Glu	Val	Ile	Arg			
95						260				265				270				
97	agc	acg	aat	cga	ggg	ttt	ccg	ctt	gtt	ctg	aat	aag	cct	cct	acg	ctt	864	
98	Ser	Thr	Asn	Arg	Gly	Phe	Pro	Leu	Val	Leu	Asn	Lys	Pro	Pro	Thr	Leu		
99						275				280				285				
101	gcf	gga	ttg	gcf	ttt	gag	cag	gag	gca	gct	ttg	aga	ctc	gtt	gag	caa	gat	912
102	Ala	Gly	Leu	Ala	Phe	Glu	Gln	Ala	Ala	Trp	Arg	Leu	Val	Glu	Gln	Asp		
103						290				295				300				
105	agt	atg	aag	gct	gtt	atg	gtg	gag	gaa	gaa	cct	aag	aaa	cgt	ggc	ttc	960	
106	Ser	Met	Lys	Ala	Val	Met	Val	Glu	Glu	Glu	Pro	Lys	Lys	Arg	Gly	Phe		
107						305				310				315		320		
109	ttc	tct	ttc	ttt	ggc	ggc										978		
110	Phe	Ser	Phe	Phe	Gly	Gly												
111					325													
114	<210>	SEQ	ID	NO:	2													
115	<211>	LENGTH:	326															
116	<212>	TYPE:	PRT															
117	<213>	ORGANISM:	Arabidopsis	thaliana														
119	<400>	SEQUENCE:	2															
120	Met	Ala	Ser	Leu	Arg	Leu	Phe	Ser	Thr	Asn	His	Gln	Ser	Leu	Leu			
121						1		5		10		15						
123	Pro	Ser	Ser	Leu	Ser	Gln	Lys	Thr	Leu	Ile	Ser	Ser	Pro	Arg	Phe	Val		
124						20		25		30								
126	Asn	Asn	Pro	Ser	Arg	Arg	Ser	Pro	Ile	Arg	Ser	Val	Leu	Gln	Phe	Asn		
127						35		40		45								
129	Arg	Lys	Pro	Glu	Leu	Ala	Gly	Glu	Thr	Pro	Arg	Ile	Val	Val	Ile	Thr		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:19

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\1553431A.raw

130 50 55 60
 132 Ser Gly Lys Gly Gly Val Gly Lys Thr Thr Thr Ala Asn Val Gly
 133 65 70 75 80
 135 Leu Ser Leu Ala Arg Tyr Gly Phe Ser Val Val Ala Ile Asp Ala Asp
 136 85 90 95
 138 Leu Gly Leu Arg Asn Leu Asp Leu Leu Gly Leu Glu Asn Arg Val
 139 100 105 110
 141 Asn Tyr Thr Cys Val Glu Val Ile Asn Gly Asp Cys Arg Leu Asp Gln
 142 115 120 125
 144 Ala Leu Val Arg Asp Lys Arg Trp Ser Asn Phe Glu Leu Leu Cys Ile
 145 130 135 140
 147 Ser Lys Pro Arg Ser Lys Leu Pro Met Gly Phe Gly Gly Lys Ala Leu
 148 145 150 155 160
 150 Glu Trp Leu Val Asp Ala Leu Lys Thr Arg Pro Glu Gly Ser Pro Asp
 151 165 170 175
 153 Phe Ile Ile Ile Asp Cys Pro Ala Gly Ile Asp Ala Gly Phe Ile Thr
 154 180 185 190
 156 Ala Ile Thr Pro Ala Asn Glu Ala Val Leu Val Thr Thr Pro Asp Ile
 157 195 200 205
 159 Thr Ala Leu Arg Asp Ala Asp Arg Val Thr Gly Leu Leu Glu Cys Asp
 160 210 215 220
 162 Gly Ile Arg Asp Ile Lys Met Ile Val Asn Arg Val Arg Thr Asp Met
 163 225 230 235 240
 165 Ile Lys Gly Glu Asp Met Met Ser Val Leu Asp Val Gln Glu Met Leu
 166 245 250 255
 168 Gly Leu Ser Leu Leu Gly Val Ile Pro Glu Asp Ser Glu Val Ile Arg
 169 260 265 270
 171 Ser Thr Asn Arg Gly Phe Pro Leu Val Leu Asn Lys Pro Pro Thr Leu
 172 275 280 285
 174 Ala Gly Leu Ala Phe Glu Gln Ala Ala Trp Arg Leu Val Glu Gln Asp
 175 290 295 300
 177 Ser Met Lys Ala Val Met Val Glu Glu Glu Pro Lys Lys Arg Gly Phe
 178 305 310 315 320
 180 Phe Ser Phe Phe Gly Gly
 181 325
 185 <210> SEQ ID NO: 3
 186 <211> LENGTH: 1182
 187 <212> TYPE: DNA
 188 <213> ORGANISM: Tagetes erecta
 189 <220> FEATURE:
 190 <221> NAME/KEY: CDS
 192 <222> LOCATION: (50)..(934)
 194 <400> SEQUENCE: 3
 195 aagcttata tcgcaactcc ataaactgatc ttcttcttct tctccggcg atg aca tcc 58
 196 Met Thr Ser
 197 1
 199 ctg agg ttt cta aca gaa ccc tca ctt gta tgc tca tcc act ttc ccc 106
 200 Leu Arg Phe Leu Thr Glu Pro Ser Leu Val Cys Ser Ser Thr Phe Pro
 201 5 10 15

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:19

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\I553431A.raw

203	aca ttc aat ccc cta cac aaa acc cta act aaa cca aca cca aaa ccc	154
204	Thr Phe Asn Pro Leu His Lys Thr Leu Thr Lys Pro Thr Pro Lys Pro	
205	20 25 30 35	
207	tac cca aag cca cca att cgc tcc gtc ctt caa tac aat cgc aaa	202
208	Tyr Pro Lys Pro Pro Ile Arg Ser Val Leu Gln Tyr Asn Arg Lys	
209	40 45 50	
211	cca gag ctc gcc gga gac act cca cga gtc gtc gca atc gac gcc gac	250
212	Pro Glu Leu Ala Gly Asp Thr Pro Arg Val Val Ala Ile Asp Ala Asp	
213	55 60 65	
215	gtt ggt cta cgt aac ctc gat ctt ctt ctc ggt ctc gaa aac cgc gtc	298
216	Val Gly Leu Arg Asn Leu Asp Leu Leu Gly Leu Glu Asn Arg Val	
217	70 75 80	
219	aat tac acc gtc gtt gaa gtt ctc aac ggc gat tgc aga ctc gac caa	346
220	Asn Tyr Thr Val Val Glu Val Leu Asn Gly Asp Cys Arg Leu Asp Gln	
221	85 90 95	
223	gcc cta gtt cgt gat aaa cgc tgg tca aat ttc gaa ttg ctt tgt att	394
224	Ala Leu Val Arg Asp Lys Arg Trp Ser Asn Phe Glu Leu Leu Cys Ile	
225	100 105 110 115	
227	tca aaa cct agg tca aaa ttg cct tta gga ttt ggg gga aaa gct tta	442
228	Ser Lys Pro Arg Ser Lys Leu Pro Leu Gly Phe Gly Gly Lys Ala Leu	
229	120 125 130	
231	gtt tgg ctt gat gca tta aaa gat agg caa gaa ggt tgc ccg gat ttt	490
232	Val Trp Leu Asp Ala Leu Lys Asp Arg Gln Glu Gly Cys Pro Asp Phe	
233	135 140 145	
235	ata ctt ata gat tgt cct gca ggt att gat gcc ggg ttc ata acc gcc	538
236	Ile Leu Ile Asp Cys Pro Ala Gly Ile Asp Ala Gly Phe Ile Thr Ala	
237	150 155 160	
239	att aca ccg gct aac gaa gcc gta tta gtt aca aca cct gat att act	586
240	Ile Thr Pro Ala Asn Glu Ala Val Leu Val Thr Thr Pro Asp Ile Thr	
241	165 170 175	
243	gca ttg aga gat gca gat aga gtt aca ggc ttg ctt gaa tgt gat gga	634
244	Ala Leu Arg Asp Ala Asp Arg Val Thr Gly Leu Leu Glu Cys Asp Gly	
245	180 185 190 195	
247	att agg gat att aaa atg att gtg aac aga gtt aga act gat ttg ata	682
248	Ile Arg Asp Ile Lys Met Ile Val Asn Arg Val Arg Thr Asp Leu Ile	
249	200 205 210	
251	agg ggt gaa gat atg atg tca gtt ctt gat gtt caa gag atg ttg gga	730
252	Arg Gly Glu Asp Met Met Ser Val Leu Asp Val Gln Glu Met Leu Gly	
253	215 220 225	
255	ttg tca ttg ttg agt gat acc cga gga ttc gaa gtg att cgg agt acg	778
256	Leu Ser Leu Leu Ser Asp Thr Arg Gly Phe Glu Val Ile Arg Ser Thr	
257	230 235 240	
259	aat aga ggg ttt ccg ctt gtg ttg aac aag cct ccg act tta gca gga	826
260	Asn Arg Gly Phe Pro Leu Val Leu Asn Lys Pro Pro Thr Leu Ala Gly	
261	245 250 255	
263	ttg gca ttt gag cag gct gct tgg aga ttg gtt gag caa gat agc atg	874
264	Leu Ala Phe Glu Gln Ala Ala Trp Arg Leu Val Glu Gln Asp Ser Met	
265	260 265 270 275	
267	aag gct gtg atg gtg gag gaa cct aaa aag agg gga ttt ttc tcg	922

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:19

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\I553431A.raw

268 Lys Ala Val Met Val Glu Glu Glu Pro Lys Lys Arg Gly Phe Phe Ser
269 280 285 290
271 ttt ttt gga ggt tagtgatcga attcggtgaa tcggttagtt gggtttgttt 974
272 Phe Phe Gly Gly
273 295
275 tggggagaa atgtgtcttg tttgttcatg taggagctgc tatgtgtcac ttgaaatgtt 1034
277 atgtgtacag taagctgata aggattgtt taattcagtt ttcagagaga aaattagaat 1094
279 tgttagcaact tttcatttga tcaattcaat tgtatttctt tggttcagtg atgaattttt 1154
281 actcaaaatc aaaaaaaaaa aaaaaaaaa 1182
284 <210> SEQ ID NO: 4
285 <211> LENGTH: 295
286 <212> TYPE: PRT
287 <213> ORGANISM: Tagetes erecta
289 <400> SEQUENCE: 4
290 Met Thr Ser Leu Arg Phe Leu Thr Glu Pro Ser Leu Val Cys Ser Ser
291 1 5 10 15
293 Thr Phe Pro Thr Phe Asn Pro Leu His Lys Thr Leu Thr Lys Pro Thr
294 20 25 30
296 Pro Lys Pro Tyr Pro Lys Pro Pro Ile Arg Ser Val Leu Gln Tyr
297 35 40 45
299 Asn Arg Lys Pro Glu Leu Ala Gly Asp Thr Pro Arg Val Val Ala Ile
300 50 55 60
302 Asp Ala Asp Val Gly Leu Arg Asn Leu Asp Leu Leu Leu Gly Leu Glu
303 65 70 75 80
305 Asn Arg Val Asn Tyr Thr Val Val Glu Val Leu Asn Gly Asp Cys Arg
306 85 90 95
308 Leu Asp Gln Ala Leu Val Arg Asp Lys Arg Trp Ser Asn Phe Glu Leu
309 100 105 110
311 Leu Cys Ile Ser Lys Pro Arg Ser Lys Leu Pro Leu Gly Phe Gly Gly
312 115 120 125
314 Lys Ala Leu Val Trp Leu Asp Ala Leu Lys Asp Arg Gln Glu Gly Cys
315 130 135 140
317 Pro Asp Phe Ile Leu Ile Asp Cys Pro Ala Gly Ile Asp Ala Gly Phe
318 145 150 155 160
320 Ile Thr Ala Ile Thr Pro Ala Asn Glu Ala Val Leu Val Thr Thr Pro
321 165 170 175
323 Asp Ile Thr Ala Leu Arg Asp Ala Asp Arg Val Thr Gly Leu Leu Glu
324 180 185 190
326 Cys Asp Gly Ile Arg Asp Ile Lys Met Ile Val Asn Arg Val Arg Thr
327 195 200 205
329 Asp Leu Ile Arg Gly Glu Asp Met Met Ser Val Leu Asp Val Gln Glu
330 210 215 220
332 Met Leu Gly Leu Ser Leu Leu Ser Asp Thr Arg Gly Phe Glu Val Ile
333 225 230 235 240
335 Arg Ser Thr Asn Arg Gly Phe Pro Leu Val Leu Asn Lys Pro Pro Thr
336 245 250 255
338 Leu Ala Gly Leu Ala Phe Glu Gln Ala Ala Trp Arg Leu Val Glu Gln
339 260 265 270
341 Asp Ser Met Lys Ala Val Met Val Glu Glu Pro Lys Lys Arg Gly

09/553,431A 6

<210> SEQ ID NO 5
<211> LENGTH: 30
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: : *see p. 7 for error explanation*
<400> SEQUENCE: 5
ccgaattcga agcagcagca ctatcaatgg

30

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:20

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\I553431A.raw

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:5

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/553,431A

DATE: 07/22/2003
TIME: 13:26:20

Input Set : A:\Un900411.app
Output Set: N:\CRF4\07222003\1553431A.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:354 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213>
ORGANISM:Artificial Sequence
L:354 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213>
ORGANISM:Artificial Sequence
L:354 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:354